

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-22 (Canceled).

23. (Currently Amended) A semiconductor device having a ferroelectric capacitor comprising:

a lower electrode laminated on one side to a substrate;

a ferroelectric thin film constructed of at least three layers including a lowermost layer, an uppermost layer and an intermediate layer located between the lowermost layer and the uppermost layer, said lowermost layer only being directly laminated on another side of said lower electrode; and

an upper electrode only being directly laminated, on one side, to said uppermost layer, so that said intermediate layer does not directly contact either said lower electrode or said upper electrode,

wherein a crystal grain of at least one of the lowermost layer and the uppermost layer is smaller than a crystal grain of the intermediate layer.

24. (Original) A semiconductor device as claimed in claim 23, wherein

a crystal grain of the lowermost layer and a crystal grain of the uppermost layer is smaller than a crystal grain of the intermediate layer.

Claims 25-27 (Canceled).

28. (Currently Amended) A semiconductor device having a ferroelectric capacitor comprising:

a lower electrode laminated on one side to a substrate;

a ferroelectric thin film constructed of at least three layers including a lowermost layer, an uppermost layer and an intermediate layer located between the lowermost layer and the uppermost layer, said lowermost layer only being directly laminated on another side of said lower electrode; and

an upper electrode only being directly laminated, on one side, to said uppermost layer, so that said intermediate layer does not directly contact either said lower electrode or said upper electrode,

wherein a crystalline nucleus density of the lowermost layer is higher than those of the intermediate and uppermost other layers.

Claim 29 (Canceled).

30. (Previously Added) A semiconductor device having a ferroelectric capacitor comprising:

a lower electrode laminated on a substrate;

a ferroelectric thin film laminated on the lower electrode and constructed of five layers including a lowermost layer, an uppermost layer and three intermediate layers located between the lowermost layer and the uppermost layer; and

an upper electrode laminated on the ferroelectric thin film,
wherein a crystal grain of at least one of the lowermost layer and the uppermost layer is smaller than a crystal grain of the intermediate layers.

31. (Previously Added) A semiconductor device as claimed in claim 30, wherein a crystal grain of the lowermost layer and a crystal grain of the uppermost layer is smaller than a crystal grain of the intermediate layers.

32. (Currently Amended) A semiconductor device having a ferroelectric capacitor comprising:

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a lower electrode laminated on a substrate;
a ferroelectric thin film laminated on the lower electrode, constructed of five layers including a lowermost layer, an uppermost layer and three intermediate layers located between the lowermost layer and the uppermost layer; and

cont.
an upper electrode laminated on the ferroelectric thin film,
wherein a crystalline nucleus density of the lowermost layer is higher than those of the uppermost and intermediate ~~other~~ layers.

33. (Previously Added) A semiconductor device as claimed in claim 30, said lowermost layer of said ferroelectric thin film being directly laminated on the lower electrode.

34. (Previously Added) A semiconductor device as claimed in claim 32, said lowermost layer of said ferroelectric thin film being directly laminated on the lower electrode.

35. (Previously Added) A semiconductor device as claimed in claim 30, the upper electrode being directly laminated on said uppermost layer of said ferroelectric thin film.

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36. (Previously Added) A semiconductor device as claimed in claim 32, the upper electrode being directly laminated on said uppermost layer of said ferroelectric thin film.
